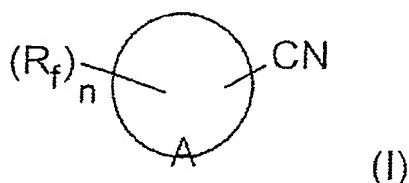


CLAIMS

1. A method for preparing an ester of an aromatic carboxylic acid bearing at least one perfluoroalkyl group on the aromatic ring, characterized in that it consists in reacting an aromatic compound bearing at least one perfluoroalkyl group and at least one nitrile group on the aromatic ring, an alcohol and a strong protonic acid, at a temperature of at least 45°C, and then in recovering the ester obtained.
2. The method as claimed in claim 1; characterized in that the aromatic compound bearing at least one nitrile group and at least one perfluoroalkyl group corresponds to general formula:

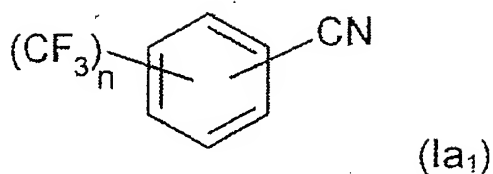


in said formula (I):

- A represents the residue of a benzene or naphthalene ring,
- R_f represents a perfluoroalkyl chain of formula $-[CF_2]_p-CF_3$ in which p represents a number ranging from 0 to 10,
- n is a number at least equal to 1, preferably between 1 and 3.

3. The method as claimed in claim 2, characterized in that the aromatic compound bearing at least one nitrile group and at least one perfluoroalkyl group corresponds to general formula:

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in said formula (Ia₁):

- n is a number at least equal to 1, preferably between 1 and 3,
- 5 - at least one trifluoromethyl group is at a 3-, 4- or 5-position.

4. The method as claimed in claim 3, characterized in that the nitrile-type compound corresponds to
10 formula (Ia₁) in which n is a number equal to 1 and the trifluoromethyl group is at the 3- or 4-position or in which n is a number equal to 2 and the two trifluoromethyl groups are at the 3- and 4- or 3- and 5-position.

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5. The method as claimed in one of claims 1 to 4, characterized in that the nitrile-type compound is substituted, preferably with alkyl or alkoxy groups, nitro groups or halogen atoms, chlorine or
20 bromine.

6. The method as claimed in claim 1, characterized in that the aromatic compound bearing at least one nitrile group and at least one perfluoroalkyl
25 group is m-trifluoromethylbenzonitrile.

7. The method as claimed in claim 1, characterized in that the alkanol corresponds to the following
30 formula:

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in said formula (II), R₁ represents an alkyl, cycloalkyl or arylalkyl group.

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8. The method as claimed in claim 7, characterized in that the alkanol is methanol or ethanol.
9. The method as claimed in one of claims 1 to 8, characterized in that the alkanol is used in a quantity such that the ratio between the number of moles of alkanol and the number of moles of nitrile-type compound (I) varies between about 1 and about 20, preferably between 2 and 6.
10. The method as claimed in one of claims 1 to 9, characterized in that the concentration of the nitrile-type compound in the medium is at least 50% by weight, preferably between 70 and 85% by weight.
11. The method as claimed in one of claims 1 to 10, characterized in that an organic solvent is used.
12. The method as claimed in claim 1, characterized in that a protonic acid having a pKa in water less than that of the starting nitrile-type compound is used.
13. The method as claimed in claim 12, characterized in that the strong protonic acid is chosen from hydracids such as hydrochloric acid, hydrobromic acid; halogenated or nonhalogenated oxyacids such as sulfuric acid, perchloric acid; halogenated or nonhalogenated sulfonic acids such as fluorosulfonic acid, chlorosulfonic acid or trifluoromethanesulfonic acid, methanesulfonic acid, ethanesulfonic acid, ethanedisulfonic acid, benzenesulfonic acid, benzenedisulfonic acids, toluenesulfonic acids, xylenesulfonic acids, naphthalenesulfonic acids and naphthalenedisulfonic acids; halocarboxylic acids such as in particular trichloroacetic acid.

14. The method as claimed in claim 12, characterized in that the strong protonic acid is chosen from hydrochloric acid, sulfuric acid, trifluoromethanesulfonic acid and methanesulfonic acid.
15. The method as claimed in claim 12, characterized in that the hydrochloric acid is used in gaseous form.
16. The method as claimed in one of claims 12 to 15, characterized in that the quantity of acid, expressed as the ratio of the number of proton equivalents to the number of moles of nitrile-type compound, can vary between about 1 and about 10, and preferably between 2 and 4.
17. The method as claimed in one of claims 1 to 16, characterized in that the method is carried out under atmospheric pressure, but preferably under a controlled atmosphere of inert gases, preferably nitrogen.
18. The method as claimed in one of claims 1 to 17, characterized in that the nitrile-type compound and the alkanol, and optionally an organic solvent, are loaded, and then the acid is introduced, preferably bubbling of hydrochloric acid.
19. The method as claimed in one of claims 1 to 18, characterized in that the reaction temperature is between 45°C and a temperature less than the boiling point of the alkanol.
20. The method as claimed in one of claims 1 to 19, characterized in that the reaction temperature is between 50°C and 60°C in the case of methanol or ethanol.

21. The method as claimed in claim 20, characterized in that the acid is added gradually, continuously or in fractions.
- 5
22. The method as claimed in claim 19, characterized in that water is added, the reaction medium is allowed to separate by decantation and then the organic and aqueous phases are separated.
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23. The method as claimed in claim 22, characterized in that the ester obtained is extracted with the aid of an organic solvent from the organic phase.
- 15
24. The method as claimed in claim 19, characterized in that the water formed during the reaction is removed by distillation.
- 20
25. The method as claimed in claim 24, characterized in that the water is removed by distillation at a temperature of between 40°C and 120°C, at atmospheric pressure or under reduced pressure ranging from 10 mm of mercury to atmospheric pressure, preferably between 10 and 200 mm of
- 25
- mercury.
26. The method as claimed in claim 24, characterized in that the alkanol and the acid are again added.
- 30
27. The method as claimed in claim 26, characterized in that the alkanol is used in a quantity such that the ratio between the number of moles of alkanol and the number of moles of nitrile-type compound (I) varies between about 1 and about 3.
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28. The method as claimed in claim 26, characterized in that the acid is used in a quantity such that the ratio of the number of proton equivalents to the number of moles of nitrile-type compound

varies between about 1 and about 2.

29. The method as claimed in claim 26, characterized
in that after maintaining at a temperature chosen
5 between 45°C and a temperature less than the
boiling point of the alkanol, the ester obtained
is recovered.
30. The method as claimed in one of claims 1 to 29,
10 characterized in that the ester obtained is a
methyl (trifluoromethyl)benzoate.
31. The method as claimed in claim 30, characterized
in that the ester obtained is methyl 3-(trifluoro-
15 methyl)benzoate.